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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,571	04/09/2004	Hideki Morozumi	NGBCP006	1972
25920	7590	01/24/2006	EXAMINER	
MARTINE PENILLA & GENCARELLA, LLP			PHAN, RAYMOND NGAN	
710 LAKEWAY DRIVE			ART UNIT	
SUITE 200			PAPER NUMBER	
SUNNYVALE, CA 94085			2111	

DATE MAILED: 01/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/821,571	<b>Applicant(s)</b> MOROZUMI, HIDEKI	
	<b>Examiner</b> Raymond Phan	<b>Art Unit</b> 2111	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 26,27,30 and 31 is/are allowed.
- 6) ☒ Claim(s) 1-20,24,25,28,29,32 and 33 is/are rejected.
- 7) ☒ Claim(s) 21-23 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10212005</u> . | 6) <input type="checkbox"/> Other: _____  |

### **Part III DETAILED ACTION**

#### ***Notice to Applicant(s)***

1. This application has been examined. Claims 1-33 are pending.
2. The Group and/or Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 2111.

#### ***Specification***

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

#### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

5. Claims 1-4, 6-13, 15-18 are rejected under 35 U.S.C. § 102(e) as being anticipated by Saito et al. (US No. 6,963,933).

In regard to claims 1, 10, Saito et al. disclose a data processing method, comprising steps of: providing a first device (i.e. A device) comprising a communicator having a first interface function (i.e. device side) and a second

interface function (i.e. host side) defined in an asymmetric interface standard (i.e. OTG standard) (see figure 1b, col. 9, lines 14-46); connecting a second device to the first device (see figure 1b); detecting whether the second device has at least one of the first interface function and the second interface function (see col. 9, lines 34-45); transmitting data, from the first device to the second device, through use of the first interface function, in a case where it is detected that the second device has the second interface function (see figure 5, col. 12, lines 27-65); and transmitting a signal for processing the data, from the first device to the second device, through use of the second interface function, in a case where it is detected that the second device has the first interface function (see figure 6, col. 13, lines 32-67).

In regard to claims 2, 11, Saito et al. disclose wherein the data includes at least one of image data, music data and motion picture data (see col. 21, line 56 through col. 22, line 30).

In regard to claims 3, 12, Saito et al. disclose wherein: it is detected that the second device has the first interface function in a case where a first type connector (i.e. miniA plug) of a cable defined under the interface standard is connected to the communicator (see col. 17, line 63 through col. 18, line 15); and it is detected that the second device has the second interface function in a case where a second type connector (i.e. miniB plug) of a cable defined under the interface standard is connected to the communicator (see col. 9, lines 13-45).

In regard to claims 4, 13, Saito et al. disclose wherein: the interface standard is an On-The-Go standard of a USB (see figure 1b); the first interface function is a device-side interface function of the USB (see col. 9, lines 13-29); and the second interface function is a host-side interface function of the USB (see figure 1B, col. 9, lines 13-45).

In regard to claims 6, 15, Saito et al. further disclose steps of: detecting whether the first interface function and the second interface function are assigned to the first device and the second device correctly (see col. 10, lines 51-63); and activating a negotiation protocol in a case where it is detected that the first interface function and the second interface function are incorrectly assigned, so that each of the first device and the second device has the other one of the first interface function and the second interface function (see col. 10, line 65 through col. 11, line 36).

In regard to claims 7, 16, Saito et al. disclose wherein the first device is a digital camera device, and the second device is a PDA device having both of the first interface function and the second interface function (see col. 22, lines 50-56).

In regard to claims 8, 17, Saito et al. disclose wherein the first device is a digital camera device, and the second device is a printer having both of the first interface function and the second interface function (see col. 21, line 47-67).

In regard to claims 9, 18, Saito et al. disclose wherein: the step of transmitting the data is performed in a case where the first device is a digital camera device and the second device is a printer having a host-side interface of a USB (see col. 21, lines 56-67); and the step of transmitting the signal is performed in a case where the first device is a digital camera device and the second device is a printer having a device-side interface of the USB (see col. 21, lines 56-67).

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 5, 14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Saito et al.

In regard to claims 5, 14, even though Saito et al. do not specifically disclose wherein each of the steps of transmitting the data and the signal is performed on the basis of one of a plurality of USB classes in accordance with at least one of a type of the second device and an application executed in the second device, however one skilled in the art would have understood that they must have USB classes and application accordance to USB standard.

8. Claims 19-20, 24-25, 28-29, 32-33 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Saito et al. in view of Ray et al. (US No. 6,832,273).

In regard to claims 19, 24, 28-29, 32-33, Saito et al. disclose a data processing method, comprising steps of: providing a first device (i.e. digital camera) comprising a storage 522 which stores data therein (see figure 13B), and a communicator 500 having a device-side interface function of a USB (see figure 13b, col. 22, lines 1-4); connecting a second device to the first device (see figure 1b). But Saito et al. do not specifically disclose the step of selecting one of a plurality of USB classes in accordance with at least one of a type of the second device and an application executed in the second device; and transmitting the data, from the first device to the second device, through use of the device-side interface function and based on the selected one of the USB classes. However Ray et al. disclose selecting one of a plurality of USB classes in accordance with at least one of a type of the second device (i.e. host device) and an application executed in the second device (see col. 6, lines 13-52); and transmitting the data, from the first device (i.e. peripheral device 114) to the second device (i.e. host device), through

use of the device-side interface function and based on the selected one of the USB classes (see figure 1, col. 7, lines 8-62). Therefore, it would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have combined the teachings of Ray et al. within the systems of Saito et al. because it would be beneficial to USB composite device makers and to software developers to specify the interfaces that comprise a single function.

In regard to claims 20, 25, Ray et al. further disclose steps of: providing, in the first device, a plurality of interface descriptors each of which is associated with one of the USB classes (see col. 7, lines 8-32); and transmitting all of the interface descriptors, in a case where the second device is adapted to at least one of the USB classes (see col. 7, lines 8-32). Therefore, it would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have combined the teachings of Ray et al. within the systems of Saito et al. because it would be beneficial to USB composite device makers and to software developers to specify the interfaces that comprise a single function.

#### ***Allowable Subject Matter***

9. Claims 26-27, 30-31, are allowable over the prior of records.
10. Claims 21-23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
11. The following is an Examiner's statement of reasons for the indication of allowable subject matter: Claims 21, 23, 26-27, 30-31 are allowable over the prior art of record because the Examiner found neither prior art cited in its entirety, nor based on the prior art, found any motivation to combine any of the said prior arts which teach wherein the interface descriptors includes: a first interface descriptor

for a first USB class used in a case where the second device is a printer having a host-side interface function of the USB; and a second interface descriptor for a second USB class used in a case where the first device serves as an external storage of the second device (claim 21); a second interface descriptor associated with a vendor-extended USB class corresponding to the USB class; transmitting, from the first device to the second device, the first interface descriptor and the second descriptor; and activating the second descriptor in a case where the first device receives a command for activating the second descriptor from the second device (claim 23); a first communications processor, operable to transmit the data to the second data processing device through use of the first interface function; a second communications processor, operable to transmit a signal for processing the data to the second data processing device through use of the second interface function; and a controller, which activates the first communications processor, in a case where the second data processing device having the second interface function is connected to the communicator, and activates the second communications processor to transmit the data, in a case where the second data processing device having the first interface function is connected to the communicator (claims 26-27, 30-31).

### ***Conclusion***

12. Claims 1-20, 24-25, 28-29, 32-33 are rejected. Claims 21-23 are objected. Claims 26-27, 30-31 are allowed.

13. The prior arts made of record and not relied upon are considered pertinent to applicant's disclosure.

**Lin (US No. 6,753,903)** discloses an adaptor for direct connection between USB digital still camera and use color printer.



**Overtoom et al. (US No. 6,732,218)** disclose a dual-role compatible USB hub device and method.

**McCauley (US No. 6,263,392)** discloses a method and apparatus for interfacing multiple peripheral devices to a host computer.

**Saito et al. (US Pub No. 2004/0017772)** disclose a data transfer control device, electronic equipment, and data transfer control method.

**Lin et al. (US Pub No. 2004/0103163)** disclose a serial bus disk extender and portable storage device.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Raymond Phan, whose telephone number is (571) 272-3630. The examiner can normally be reached on Monday-Friday from 6:30AM- 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Primary, Paul Myers can be reached on (571) 272-3639 or via e-mail addressed to paul.myers@uspto.gov. The fax phone number for this Group is (571) 273-8300.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [raymond.phan@uspto.gov].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 central telephone number is (571) 272-2100.



**Raymond Phan**  
January 12, 2006



REHANA PERVEEN  
SUPERVISORY PATENT EXAMINER  
1/19/06